Government of West Bengal
Office of the Superintendent
M.R. Bangur Hospital, Kolkata 700 033

Memo No. MRBH/ 2414/1 Dated 3rd September, 2011

TENDER NOTICE FOR MEDICAL EQUIPMENTS FOR SICK NEWBORN CARE UNITS (SNCU) at M.R.BANGUR, KOLKATA

Inviting companies/manufacturers for bids for rate contracting of instruments/equipments in SNCU at M.R.BANGUR HOSPITAL, KOLKATA

Tender are invited from reputed Companies/Manufacturers for procurement of instrument/equipment for SNCU at M.R.BANGUR HOSPITAL, KOLKATA

- List of equipments are enclosed as in Annexure "B"
- Details of equipment with specification are enclosed as in Annexure "C"
- The pre-qualification and minimum eligibility criteria required are enclosed as annexure "D"

Project Objective:

Last date and time for seeking clarification	**1730 Hrs. on 9/09/11** **Email Id: supdt_mrbangr@wbhealth.gov.in**
Last date, time and venue for bid submission	**1100 Hrs. on 21/09/11** **At "office of Superintendent, M.R. Bangur Hospital" 241, Despran Sasmal Road, Kolkata-33**
Date, time and venue of Bid Opening	**1600 Hrs. on 21/09/11** **At office of Superintendent, M.R. Bangur Hospital, 241, Despran Sasmal Road, Kolkata-33**
	[All times shown are as per the Indian Standard Time]

1. To provide quality services for newborn at M.R.BANGUR HOSPITAL, KOLKATA

2. The equipments must be exclusively and specially designed for newborns, must be best durable in the conditions available at the site of installation and good and quality services for the same should be available at the site. Arrangements should be made in such a manner that in no way the services are hampered or held back for more than 24 hours or else spare equipment should be provided. Training of local persons, availability of spare parts and consumable items must be assured.

Submission Requirements: Interested companies/manufacturers wishing to undertake the above assignment may submit their tender in a large envelope marked and written on top "Tender Bid for Rate contracting of equipments/instruments for SNCU at M.R.BANGUR HOSPITAL, KOLKATA.

"This large envelope will contain two separate sealed envelopes – One for technical bid marked as cover-A and the other envelop for financial bid marked as cover –B. They are requested to clearly indicate each of the submission requirements mentioned above in the cover letter/application accompanying the technical proposal. Each page of the technical proposal should be serially numbered. The cover letter should be accompanied with an item index and page numbers.

Technical Bid:

The technical bid envelope shall be eligible for the Bid only if the envelope contains the following information and documents:

1. Name and address of the Company/Manufacturers.
2. Audited Annual Report of the Company/Manufacturers for the last 3 (three) years.
3. Sale Tax registration Certificate of the Company/Manufacturers.
4. Non-conviction Certificate issued by the Competent Authority.
5. Only the principal Company/OEM/Representative can participate and need to fill the declaration form
6. Earnest money: Bidder will be required to deposit Rs.5,000 (Rupees five Thousand) in TR form7 under head of account: 8443 -00-103-001-V-07 and the original challan should be enclosed with the Tender

Terms of Tender:

1. The final price quoted shall be inclusive of all taxes.
2. The warranty should be mentioned as in annexure "C".
3. The machine/equipments shall have to be installed at M.R.BANGUR HOSPITAL, KOLKATA

4. The rates quoted shall be strictly inclusive of all transportation costs to be incurred for supplying the machine/equipment to the M.R.BANGUR HOSPITAL, KOLKATA for installation.
5. The rate shall be inclusive of all the cost to be incurred towards training, that will be provided by the concerned agency to the concerned District Officers at M.R.BANGUR HOSPITAL, KOLKATA thrice in the first three months (i.e. once in every month)
6. Provision of CMC/Warranty: serial no CMC shall include the placement of all spare parts including bulks, battery, cable and electrodes.

Financial Bid:

The financial bid shall be eligible for the Bid only if it is given in the following format:

Serial no	Name of the Instrument	Cost of items (the cost shall be inclusive of all taxes/services and provisions in the terms of tender)
Schedule no:	Item description (respective to schedule)	Amount in Indian Rupees in number and words format.
Schedule no:	Cost of CMC with the rates for each year for next five years.	Amount in Indian Rupees in number and words format.

Note:

1. Cost of each and every schedule should be quoted separately.
2. Earnest money: Bidder will be required to deposit Rs. 5,000 (Rupees five Thousand) only in TR form7 under head of account: 8443 -00-103-001-V-07 and the original challan should be enclosed with the Tender
3. Separate earnest money should be paid for separate schedule.
4. The vendor has option to quote for more than one model for a particular schedule at the same earnest amount.

5. The quoted price compromises of installation , calibration, testing and handover to purchaser for that particular schedule for all over the State.
6. 3% of the actual cost would be initially deposited with the local authority and released by the local authority at the end of warranty period only after confirming of proper functioning of the said inst rument during the warranty period. In case the equipment was not functioning/ out of order for more than one week without any replacement a fine of 0.1% per week would be deducted for malfunctioning of the equipment. A separate register would be maintained for the maintenance of the said instruments.
7. Comprehensive MC would be made for next five years and would also be taken into account while deciding the financial bid. The funds would be sanctioned for five years at the time of purchase. The same would be kept with the local authorities and paid to the company at the end of every year after complete satisfactory services.

Opening of Bids:

The Technical bids shall be opened on 1600 Hrs. on 21/09/11 at office of Supt M.R. Bangur Hospital 241, Despran Sasmal Road, Kolkata-33 in the presence of bidders/ authorized representative who desire to be present. The technical expert committee shall also rate the quality of equipments among those who are eligible.

The financial bids of only those Tenders will be opened whose technical Bids are found to be eligible by the committee.

FOR INFORMATION OF BIDDERS:

1) The Tender committee reserves all the right to reject any or all tender without assigning any reason thereof .

2) Acceptance of lowest tender is not obl igatory and the Tender committee reserves all the right to reject any or all tender without assigning any reason thereof

3) The supplier has to ensure supply within the stipulated time period or else suitable action shall be taken against them including c ancellation and awarding

the order to the next bidder. The selected company/ firms will be immediately informed about the final award. In case the selected company declines to take up the purchase order, hence forth directly from the districts on the quoted and approved rates, it would be barred from applying for any tender to the Government of West Bengal for three years from the date of award. For further enquiry please contact 9830452819 between 10 AM to 4 PM

4) If the successful bidder fails to abide by the terms of condition of the Purchase order the Earnest money deposited is liable to be forfeited.

5) The tender should be accompanied on a hundred rupee stamp paper that the item to be supplied has to be from the manufacturer's shelf and should be of original make and latest version.

6) Security deposit will be charged from the selected bidder as per the financial rules and regulation

7) Incomplete tender will be rejected summarily without showing any reason thereof by the Tender Committee

8) The offered rate should be inclusive of charges such as toll charge (if any), carriage cost, VAT etc.

9) No advance payment will be allowed.

10) Acceptance of lowest tender is not obligatory & the undersigned reserves the right to accept any tender or to reject any or all tenders without assigning any reason.

Schedule of Requirements

List of Goods and Quantity

Schedule No.	Description of Goods Quantity Unit Bid Security in INR/USD	**Quantity**	**Unit**	**Bid Security in INR/USD to be given only after the order is placed to the selected bidder which would be returned to the supplier on successful compliance to the terms and condition till the Warranty period**
1	Resuscitation kit	46	Numbers	3% of the total price quoted/offered
2	bilirubinometer	1		
3	microcentrifuge	1		
4	3 part Cell counter	1		
5	ABG machine	1		
6	Low reading thermometer	46		
7	Neonatal stethoscope	46		
8	Measuring tape	46		
9	Infantometer	4		
10	Electronic weighing scale	4		
11.	Electrically operated slow suction machine	30		
12	Foot sucker	20		
13	Room thermometer	4		
14	Flux meter	1		
15	Breast pump	2		
16	Oxygen hood	30		
17	DVD player	2		
18	LCD tv	2		
19	Netbook	1		
20	Vertical laminar flow	1		
21	Neonatal ventilator	8		
22	Bubble cpap	4		
23	ETO machine	1		
24	Fogger	1		
25	Industrial grade washing machine	1		
26	Industrial grade drying machine	1		
27	Mini floor washer with side brush	2		
28	3 bucket trolley on wheels with wringer	4		
29	Wet and dry mopstick	10		
30	Transport ambulance	1		
31	Transport ventilator	2		
32	Transport incubator	2		

Delivery & Completion Schedule:

I. **Delivery to Consignee within 30 days from the date of issue of the Purchase Order/Contract as per the Consignee). In case of Imported items an extra of 15 days would be given**

II. **Installation, training & commissioning:**

Installation, Training (Paramedics and end users on proper usage of equipments and Maintenance) and Commissioning as per the **Consignee 10 Days** from the date of issue of the Purchase Order/Contract (5 days extra may be assigned by consignee for proper conduct of training).

Terms of Delivery:

Note: (i) The responsibility of arranging all required documents, including Custom clearance (if Applicable), Road Permits etc. is of the Supplier.
(ii) Installation of Medical Equip ments will be at M.R. Bangur Hospital, Kolkata
(iii) Training on Medical Equipments will be at M.R. Bangur Hospital, Kolkata

SCHEDULE NO: 1
TECHNICAL SPECIFICATION:

Resuscitation kit:

EACH NEONATAL RESUSCITATION KIT TO CONTAIN:

1. Neonatal self inflating resuscitation bag (silicon, autoclavable) with open type oxygen reservoir

Half of the sets to contain 500 ml bags and the others half will contain 250 ml bags

2. Neonatal round shaped, cushioned, face mask (silicon, autoclavable): each set to contain one each of 00, 0, and 1/0 size

3. Oxygen Tubing-1

4. Neonatal laryngoscope (With extra bulb) with straight blade of different sizes- each set to contain one each of 00, 0, and 1 size

- Hand operated neonatal resuscitator (500ml)

  Technical specifications:

(i) Resuscitator for manual ventilation of neonates.

(ii) Ventilation can be done with ambient air/with oxygen.

(iii) It can be totally disassembled, easy to clean, disinfect and sterilize.

(iv) All parts can be autoclaved at 121ºC (except oxygen reserve bag).

(v) Manufactured from durable high-strength synthetic not requiring special maintenance or storage.

(vi) It should be supplied as a complete set in a box.

(vii) It should be compressible self-refilling ventilation bag, capacity approximately 500ml.

(viii) It should be with non-re breathing patient valve with pressure limitation.

(ix) Intake valve should have nipple for oxygen tubing.

(x) Oxygen reserve bag complete capacity approximately 2000ml.

(xi) It should have a 3 cushioned neonate size masks, translucent (size "0", approximately 50mm).

(xii) The device should be produced by ISO 9001 certified manufacturer (certificate to be submitted, for further details please check "Technical provisions")

(xiii) The device is safety certified according CE 93/42, FDA 510k/equivalent (certificate to be submitted, for further details please check " Technical provisions")

Supplied with:

(i) User manual with trouble shooting guidance in English.

(ii) Technical manual with maintenance and first line technical intervention instructions, in English.

(iii) List of priced accessories.

(iv) List of priced spare parts.

(v) List with name and address of technical service providers in India.

(vi) Proposal for full warranty up to 1 year from the date of complete and proper installment, covering on-call technical interventions, spare parts and travel.

- <u>Neonatal laryngoscope (With extra bulb)</u>

Technical Specification:

i. High quality corrosion resistant stainless steel blades and body

ii. Light source firmly fixed with blade
iii. Blades size 00, 0, and 1: 3 sets with each
iv. Supplied with 15 spare bulbs each
v. Straight blade for neonatal use
vi. Should withstand chemical sterilization and autoclaving
vii. Preference will be given to a fibre-optic cold light source

SCHEDULE NO: 2
TECHNICAL SPECIFICATION:

Bilirubinometer:

- Description of function:

(i) Bilirubinometers are instruments that are simple to operate and are designed to measure the concentration of Bilirubin in blood.

- Operational requirements:

(i) It should be dedicated Bilirubinometers that use spectrophotometer techniques to analyze whole blood, serum or plasma samples.

- Technical specifications:

(i) It should bench top point-of-care bilirubinometer.
(ii) It should directly reading photometry determining Total bilirubin in serum/plasma.
(iii) It should have 'on' switch and auto switch 'off' facility.
(iv) It should have auto calibrations setting between measurements.
(v) It should have dual wave lengths measurements: 455nm & 575nm.
(vi) It should have correction for Hemoglobin at 550nm.
(vii) It should measure sample size: 1 capillary tube with serum/plasma.

(viii) It should have main light source of 5W tungsten lamp.

(ix) It should have a measuring range of 0-700µmol/l or 0-40mg/100ml.

(x) It should have an accuracy equivalent to Laboratory Spectrophotometer (approximately ±5%)

(xi) It should have read-out switch able between mg/100ml of µmol/l.

(xii) It should have fast analysis time <5 seconds.

(xiii) The unit should have a large LED display readable in low light working situations, display cover durable plastic with integrated printer (optional).

(xiv) It should have one beam or two beam.

- System configuration-accessories, spares and consumables:
  - System as specified should provide disposable cuvettes to avoid sample cross-contamination, troubleshooting codes, plain cuvette for check and calibration, optional printer, standard accessories, reference solution packages, box of micro capillary tubes-inner diameter 1mm, length 7nm,heparinized, pack of sealing compound for micro capillary tubes; spare lamp, dust cover.
  - Environmental factors:

(i) It should meet IEC-60601-1-2:2001/ equivalent BIS general requirement of safety for electromagnetic compatibility or should comply with 89/366/EEC; EMC-directive.

(ii) The unit should be capable of being stored continuously in an ambient temperature of 0-50ºC and relative humidity of 15-90%.

(iii) The unit should be capable of operating continuously in an ambient temperature of 10-40ºC and relative humidity of 15-90%.

  - Power supply:

(i) Power input should be 220-240VAc, 50Hz.

(ii) Voltage corrector/ stabilizer of appropriate ratings meeting ISI specifications (input 160-260V and output 220-240V and 50Hz).

  - Standards, safety and training:

(i) It should be a safety certified approved product.

(ii) Manufactures/ suppliers should have ISO certificate to Quality Standard.

(iii) Electrically safety conforms to standards for electrical safety IEC-60601/IS-13450.

· Documentation:

(i) User/Technical/Maintenance manuals to be supplied should be in English.

(ii) Certificate of calibration and inspection.

(iii) List of important spare parts and accessories with their part number and costing.

SCHEDULE NO: 3
TECHNICAL SPECIFICATION:

Microhaematocrit Centrifuge with capillary tubes, bench top, up to 12000rpm, including motor:

- Technical specifications:

(i) Bench top centrifuge for quick assessment of haematocrit.

(ii) Rotation up to 12000rpm, adjustable in increments of 100.

(iii) Timer settable in minutes, maximum preset 99minutes.

(iv) Safety lid-lock feature and emergency lid release.

(v) Motor overheating protection and imbalance shut-off.

(vi) Digital display shows rpm and time.

(vii) Angle rotor, 24 positions, maximum approximately 16000 rcf.

(viii) Power requirements-220V/50Hz.

(ix) Power consumption-200W.

(x) Device is produced by ISO 9001 certified manufacturer (certificate to be submitted, for further details check “Technical Provisions”)

(xi) Device is safety certified according to CE 93/42, FDA 510k or equivalent (certificate to be submitted, for further details check “Technical Provisions”)

- Supplied with:

(i) 1 x box of micro capillary tubes, inner diameter 1mm, length 7mm, heparinized.

(ii) 1 x pack of sealing compound for micro capillary tubes.

(iii) 1 x spare set of fuses.

(iv) User manual with trouble shooting guidance, in English.

(v) Technical manual with maintenance and first line technical intervention instructions, in English.

(vi) List of priced accessories.

(vii) List of priced spare parts.

(viii) List with name and address of technical service providers in India.

(ix) Training and installation at end-user site.

Proposal for full warranty up to two years from the date of installed properly, covering on-call technical interventions, spare parts and travel

SCHEDULE NO: 4
TECHNICAL SPECIFICATION:

Three Part Blood Cell Counter:

Technical Specifications:

Table top Fully automatic sample aspiration, dilution and analysis capable 3 part diff blood cell counter.

Volumetric impedance, radio frequency, laser light scatter

Specification

1. Para meters at least 16. WBC, RBC, HGB, Hct, MCV, MCH, MCHC, RDW, Plt, MPV, N#, N%, L#, L%, M#, M%, E#, E%, B#, B%, Retic#, Retic%

2. Histograms for WBC, RBC, Platelet.

3. Dual channel measurement to measure WBC/Hb & RBC/Platelet in Separate dedicated channels.

4. Sample- Whole blood.

5. Speed: 60/80 samples per hour. Sample volume <=50 micro litres.

6. Data storage: At least 200 samples and data management software Facility to store more samples.

7. Dilutions ratio: WBC/Hb 1:200 & RBC/Platelet 1: 40,000.

8. Precision: Parameter whole blood mode, WBC<= 3.5%,RBC <=2%,HGB<=1.5%,HCT<=2%,Plt<=6%.

9. Minimal start up time.

10. Availability of reagents: Should have local manufacturing facility in india.

11. Power requirement 220/230 50/60 Hz

12. Display 5 to 6 inches colour TFT LCD touch screen key monitor.

13. Auto dilution facility for pathological samples (extremely high or low Value samples)

14. Interface: Serial port for host computer.

15. Built in Thermal printer.

16. Daily automated calibration.

17. Optional cap piercing unit for safe Sample handling.

Supplied with:

• User manual with trouble shooting guidance, in English

• Technical manual with maintenance and first line technical intervention instructions, in English

• List of priced accessories

• List of priced spare parts

• List with name and address of technical service providers in India

• Training and installation at end-user site

• This machine should be supplied with the given understanding and intention that the government will not purchase the machine per se, but will pay on monthly basis the cost of the reagents. At present the average requirement will be about 200 samples/month. Interested party will also have to maintain the machine and government will not pay for same. Interested party will have to ensure minimum down time and regular preventive maintenance as well as calibration at monthly interval. This contract will be valid for 5 yrs and can be annulled on either party's discretion with 3 months notice.

SCHEDULE NO: 5
TECHNICAL SPECIFICATION:

Automatic Blood gas Analyser machine:

1. Fully Automatic Blood gas analyzer in one model only to measure blood gases, Electrolytes Na, K, Cl & Ca, Hct, metabolites- Glucose & Lactate.
2. Should have require only 2 consumables for easy handling. The Fluid and sensor should be separate to allow trouble free operation.
3. No Manual calibration steps should be required for Calibration after changing of pack or sensor. Fully automatic Tonometered calibration of all parameter in fixed or user friendly intervals.
4. Consumables should be allowed for reuse up to 10 times within onboard stability after installation in case Analyzer is switched off.
5. Consumables should not require any pre installation preparation. Should allow for direct usage on the analyzer.
6. Should have Graphically guided user interactions for all Major Workflows. On Board videos for all handling steps for easy operator training.
7. Should Accept all Sample Containers including capillary without adapters. Sampling Area should be enclosed to reduce risk of contamination.
8. Consumables should have smart chips to avoid scanning of consumables while installation.
9. Should have In Built thermal printer wider than 100 mm.

10. Should have In built data management system to store patient results. QC results, calibration reports & self diagnosis.

11. Sample through put of @ 30 samples per hour.

12. Should have ASTM or POCT1-A interface. Data Transfer should also be possible via pen drive. Barcode reader for Patient ID identification should be standard accessory.

13. Should have Built-in color TFT-LCD bigger than 10 inch flat screen (touchscreen) monitor

14 It should follow the international Safety & Standards & requirement.

15 All standard accessories should be provided.

16. Training to engineer.

17 Operating and detailed service manual should be supplied.

18. Power supply 100-240 V, 200 W, 50 / 60 Hz autoselecting

Voltage stabilizer should be supply if required.

SCHEDULE NO: 6
TECHNICAL SPECIFICATION:

Wet Biochemistry Analyser:

Fully Automatic Photometric Analyzer

- Fully automated, latest and compact bench top analyzer to perform the analysis of substrates, enzymes and special parameters from blood, serum, plasma and urine samples.
- System should be Discrete, fully selective random access with a provision to test STAT samples.
- Machine should be easy to move with in the laboratory and should be mobile for field usage / testing.
- System should have a routine throughput of 60 tests / hr and 180 test / hr with electrolytes.
- Onboard sample capacity should be at least 5 or more.
- Flexibility to use different sample containers like primary tubes with different sizes, sample cups, micro cups and cup on tube for easy processing.
- Facility to keep 25 – 30 reagent bottles for testing 12 - 18 common tests with on board refrigeration.
- Sample volumes should be less than 20 ul per test.
- System must use disposable cuvettes to prevent any carryover without the use of any onboard washing and requirement of high quality water.
- System should be used for testing Ammonia, Microalbumin, HbA1c, Lactate, hsCRP, D-Dimer, Homocystene, Cystatin C and electrolytes (Na, K and Cl) besides the routine clinical parameters.

- Machine should use single robotic head with a probe to dispense samples and regents with sensors for liquid level and tube bottom detection.
- System should have gradient 12 wavelength photometer with mono and bi-chromatic measurements.
- Light source should be with 20 W halogen lamp having lamp save feature.
- System should have on board microprocessor with color touch screen display for easy operation. On board storage facility for 300 samples is mandatory.
- Facility to view last 60 days QC results with graphic display analysis of results over time is mandatory.
- System should be having built in thermal printer to take printout of patient results.
- Barcode scanner to scan the reagents and patient samples.
- System should have 2 x RS 232 bidirectional interface and 2 x USB ports for connecting to LIS / HIS for results and data transfer.
- Power supply – 220 V / 50 Hz with suitable online UPS must be supplied along with the system.
- This machine should be supplied with the given understanding and intention that the government will not purchase the machine per se, but will pay on monthly basis the cost of the reagents. At present the average requirement will be about 200 samples/month. Interested party will also have to maintain the machine and government will not pay for same. Interested party will have to ensure minimum down time and regular preventive maintenance as well as calibration at monthly interval. This contract will be valid for 5 yrs and can be annulled on either party's discretion with 3 months notice.

SCHEDULE NO: 7
TECHNICAL SPECIFICATION:

Dry Biochemistry Analyzer:

Automated, latest, portable micro processor controlled dry chemistry analyzer for measuring various routine clinical chemistry parameters using reflectance photometry principle

System should be totally maintenance free with no user maintenance

The parameter menu should include Glu, Urea, UA, Chol, TG, HB, SGPT, SGOT, P-Amylase, K^+, Crea etc. with a minimum of 15 on board parameters

It should use various sample types like Whole Blood, Serum, Plasma and Urine

Sample volume for measurement should be less than 50 ul per parameter

Sample throughput should be for a minimum of 20 samples per hour

It should have a analysis time of less than three minutes per parameter

System should have a short warming time of less than 5 minutes

System should use individual dry chemistry test strips with auto detection and high linearity range for measuring different parameters. No warm up time required for strips before usage

Strip should have a minimum shelf life of 12 months at room temperature storage without use of any special refrigeration.

System should allow flexible programming of incubation temperature of strips at 25°C or 30°C or 37°C based on user requirement

System should have fully automated factory set calibration for all parameters. No manual calibration should be required during the life time of the machine

It should store minimum of 50 patient results including patient id, date and time

System should use LED as a light source with two photo diodes for light detection

Shelf life of the light source should be for over and above 50,000 measurements

It should have built in LCD display to view the results

System should be having built in key board for any data input

Results should be printed on built in thermal printer

Interface facility should be with RS 232 for data transfer and option to use external key board

System should operated with mains at 110 - 220V/50 Hz or with 12/24 V battery using the 10 -30V optional socket

· This machine should be supplied with the given understanding and intention that the government will not purchase the machine per se, but will pay on monthly basis the cost of the reagents. At present the average requirement will be about 200 samples/month. Interested party will also have to maintain the machine and government will not pay for same. Interested party will have to ensure minimum down time and regular preventive maintenance as well as calibration at monthly interval. This contract will be valid for 5 yrs and can be annulled on either party's discretion with 3 months notice.

SCHEDULE NO: 8

TECHNICAL SPECIFICATION:

Low-Reading digital thermometer (centigrade scale):

- Digital LCD display (at least 31/2 digit)
- Accuracy +2 5
- Skin probe

Supplied with:

(i) List of spare parts.

(ii) One extra temperature probe.

(iii) Training and installation at user site.

(iv) Proposal for full warranty up to one year from the date of installed properly and completely, covering on-call technical interventions, spare parts and travels.

SCHEDULE NO: 9

TECHNICAL SPECIFICATION:

Neonatal stethoscope(binaural):

- Technical specifications:

(i) Double cup neonatal stethoscope.

(ii) Chest piece in stainless steel with non-chill plastic rim.

(iii) Diaphragm approximately 20mm.

(iv) Sensitivity approximately 3.0dB from 50-500Hz (cardio).

(v) Sensitivity approximately 8.0 db from 600-1500Hz (pneumo).

(vi) Y tube: treated rubber with a large diameter.

(vii) Arms: stainless steel or chrome brass, with treated spring for lasting elasticity and comfort.

(viii) Removable plastic ear pieces.

(ix) Device is produced by ISO 9001 certified manufacturer (certificate to be submitted, for further details please check “technical provisions”)

- Supplied with:

(i) 1 x spare set of earpiece.

(ii) 1 x spare diaphragm.

(iii) User manual with trouble shooting guidance in English.

(iv) Technical manual with maintenance and first line technical intervention instructions, in English.

(v) List of priced accessories.

(vi) List of priced spare parts.

(vii) List with name and address of technical service providers in India.

(viii) Proposal for full warranty up to 1 year from date of installed properly, covering on-call technical interventions, spare parts and travel.

SCHEDULE NO: 10

TECHNICAL SPECIFICATION:

Non stretchable measuring tape (mm scale)

Technical specifications:

(i) Vinyl-coated fibre glass measuring tape.

(ii) Metal tip finishing at both ends.

(iii) Reads both in cm & inch.

(iv) Length- 1.5m/5ft.

(v) Minimal graduation-0.5cm/0.2 inch.

(vi) Width approximately- 1.3 cm.

(vii) Thickness approximately-0.36 mm.

(viii) The device should be produced by ISO 9001 certified manufacturer (certificate to be submitted, for further details please check “technical provisions”)

SCHEDULE NO: 11
TECHNICAL SPECIFICATION:

Infantometer:

- Should have a sleek, broad acrylic base with one sliding side as per length of the baby.
- Should have a dual scale for direct reading in centimeter from 0-45 and 45-90 cm.
- There should be folding sides for easy storage

SCHEDULE NO: 12
TECHNICAL SPECIFICATION:

Electronic Weighing Scale:

Desirable specifications:

- It should be table top, light and portable.
- It should have a built in rechargeable battery.
- It should be hygienic and have an easy to clean baby tray.
- It should have an Acrylic (non metallic) baby tray.
- It should have reproducible weights.
- It should have a resolution of ± 1gm.
- It should have a freeze reading display.
- It should have a zero weight adjustment facility.
- It should have quick clear digitals read outs.

- The measurements should not change with position of baby on the pan.
- It should have a calibration facility with prerecorded weights (500gms, 1000gms, 2000gms)

SCHEDULE NO: 13
TECHNICAL SPECIFICATION:

Electrically operated pressure controlled slow suction machine:

- Description of function:

To extract fluid from body during emergency treatment

- Operational requirements:

(i) It should have Crompton Greaves/ American Universal/GEC Motor of minimum ¼ H.P capacities.

(ii) The machine should be portable on four wheels and handle for transportation.

- Technical specifications:

(i) The suction pump should be oil immersed fitted on motor shaft.

(ii) It should have line grinding internally.

(iii) To facilitate maintenance the cover of machine should be easy to open

from the top and sides.

(iv) The suction machine should be capable of producing minimum vacuum of 500 approximately mm Hg, which should be adjustable and monitored by vacuum gauge of suitable range. The suction capacity should be 15L per minute and can be regulated.

(v) It should have two bottles of 1/2L (as per requirement) with synthetic rubber lids. The bottle shall be fitted with the arrangement to prevent overflow of fluid.

(vi) On/Off switch and power indicator should be available.

(vii) Body material: base, top and panel should be made of rust proof and corrosion resistant moulded ABS/stainless steel. The jar/bottle material: autoclavable polycarbonate.

(viii) Inbuilt maintenance free battery. The battery backup up to 60minutes on full charge. It should be provided with cable for ambulance/ car use.

- Systems configuration accessories, spares and consumables:

(i) System as specified.

(ii) There should be a core lead of 2 meter along with one 3 pin 15 amp, plug-01 in no.

(iii) Power cable-3 core lead of 5 meter along with one 3 pins 15 amp, plug-01 in no.

(iv) The following spare parts per machine are also required:-

a. Bottles- 2
b. Lids-2
c. Rubber seals- 2
d. Blades- 2
e. Suction tubing set- 1

- Environmental factors:

(i) It should meet IEC-60601-1-2:2001/equivalent BIS), general requirements of safety for electromagnetic compatibility/ should comply with 89/366/EEC, EMC directive.

(ii) The unit should be capable of stored continuously in ambient temperature of 0-50ºC and relative humidity of 15-90%.

(iii) The unit should be capable of operating continuously in an ambient temperature of 10-40ºC and relative humidity of 15-90%.

- Power supply:

(i) The power input should be 220-240VAC, 50 Hz fitted with an Indian plug.

(ii) A fuse/ a resettable circuit breaker of an appropriate capacity should be incorporated for protection of motor.

(iii) It should work on 220-240VAC as well as batteries. The mains adaptor is to be supplied.

- Standards, safety and training:

(i) It should be FDA, CE, UL/BIS approved product.

(ii) It should conform to BIS standard for suction apparatus IS-4533, Latest revision except where specified here differently.

(iii) Manufacturer/supplier should have ISO certification for quality standards.

(iv) There should be a comprehensive warranty for 5 years.

- Documentation:

(i) User/technical/maintenance manuals to be supplied in English.

(ii) Certificate of calibration and inspection should be submitted.

(iii) List of important spare parts and accessories with their part number and costing.

(iv) Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.

(v) The job description of the hospital engineer should be clearly spelt out.

SCHEDULE NO: 14
TECHNICAL SPECIFICATION:

Foot operated portable suction machine:

(i) To extract fluid from the body during emergency treatment.

(ii) The suction machine should be capable of producing minimum vacuum of 500 approximately mm Hg, which should be adjustable and monitored by vacuum gauge of suitable range. The suction capacity should be 10l per minute and can be regulated.

(iii) It should have two bottles of 10L with synthetic rubber lids. The bottle should be fitted with the arrangement to prevent overflow of fluid.

(iv) The body material: base, top and panel should be made up of rust proof and corrosion resistant moulded ABS/stainless steel. The jar/ bottle material: autoclavable polycarbonate.

(v) The following spares per machine are also required:-

a. Bottles-2.
b. Lids- 2.
c. Rubber seal- 2.
d. Blades- 2.
e. Suction tubing- 1 set.

(vi) proposal for full warranty up to 1 year from date of installed properly, covering on-call technical interventions, spare parts and travel.

SCHEDULE NO: 15
TECHNICAL SPECIFICATION:

Room Thermometer:

- It should be water proof.
- Digital read out should be large.
- Temperature should be displayed in centigrade.
- Thermometer should check temperature every second for quick and accurate measurements.

- There should be maximum and minimum reading memory.
- Battery replacement should be easy.
- Measuring range: 10-50ºC.
- Display accuracy: ± 1ºC.
- Display resolution: 0.1º
- Display reading update: 1 second.
- Battery: 3 volt Lithium, size CR 2032/equivalent x 1 piece (included)

SCHEDULE NO: 16
TECHNICAL SPECIFICATION:

Flux meter:

- Portable analyzer.
- Measure field with auto change scale (1-1999µw/cm2)
- Frequency field 400-500nm.
- Work temperature 0-50ºC.

- Humidity 0-95%.
- Backed by 9V battery.
- Autonomy 300 hours.
- Provision for signal of discharge of battery.
- Instrument to be supplied with a probe in a leather case.
- Provision for data hold button.
- Zero adjusting by push button switch.
- LCD contrast for adjusting contrast of display.

SCHEDULE NO: 17
TECHNICAL SPECIFICATION:

Breast Pump:

Description of function:

Breast pumps are instruments that are simple to operate and are designed to initiate and maintain milk supply if direct breastfeeding is not possible and to relieve engorgement.

Technical specifications:

- It should be bench top breast pump.
- Should be double pump.
- Capable of long term daily use in Hospital.
- Multiuse facility built in vacuum release to protect against excessive or prolong suction.
- With automatic suck and release system.
- Should be made of food grade hygienic material.
- Easy to clean and sterilise.

Power supply:

- Power input should be 220-240VAc, 50Hz.
- Voltage corrector / stabilizer of appropriate ratings meeting ISI specifications (input 160-260V and output 220-240V and 50Hz).

Standards, safety and training:

- It should be a safety certified approved product.
- Manufactures / suppliers should have ISO certificate to Quality Standard.
- Electrically safety conforms to standards for electrical safety IEC-60601/IS-13450.

Supplied with:

- Breast shield- of various sizes .
- 80 ml breast milk freezing & storage bulk pack
- extra membranes
- extra valves & membranes (2/pack)
- 100% cotton washable nursing pads
- Disposable nursing bra pads - 30 count
- User manual with trouble shooting guidance, in English
- Technical manual with maintenance and first line technical intervention instructions, in English
- List of priced accessories
- List of priced spare parts
- List with name and address of technical service providers in India
- Training and installation at end-user site
- Proposal for full service AMC, year 1 to 5, covering

  (i) 2 preventive maintenances per year,

  (ii) on-call technical interventions, spare parts and travel.

SCHEDULE NO: 18
TECHNICAL SPECIFICATION:

Oxygen Hood (unbreakable-neonatal/infant size) - S & m, set of three each, including connecting tubes:

Technical specifications:

- Round shape

- 3 x size small, approximately: height 22cm, diameter 25 cm.
- 3 x size medium, approximately: height 18cm, diameter 20 cm.
- Made of autoclavable polycarbonate.
- Trauma free silicone neck, with adjustable flap.
- It should be provided with bilateral oxygen nozzle.
- It should be provided with Oxygen tube of 2m length.
- The device should be produced by ISO 9001 certified manufacturer (certificate to be submitted, for further details please check "technical provisions")
- The device is safety certified according CE 93/42, FDA 510k/ equivalent (certificate need to be submitted for further details please check "technical provisions")

Supplied with:

- 1 x spare set of tubings.
- User manual with trouble shooting guidance in English.
- Technical manual with maintenance and first line technical intervention instructions, in English.
- List of priced accessories.
- List of priced spare parts.
- List with name and address of technical service providers in India.

SCHEDULE NO: 19

TECHNICAL SPECIFICATION:

DVD Player:

Item	Supported Media	Supported format	Connectivity	Warranty
DVD Player	DVD, DVD-R, DVD-RW, DVD+R, DVD+RW,	DivX, MP3,MP4,MPEG WMA, JPEG,	USB, Component In, Composite	At least 1year, Onsite preferable

	CD, CD-R, CD-RW			

SCHEDULE NO: 20
TECHNICAL SPECIFICATION:

LCD TV 22 inch, LCD TV 32 inch:

LCD TV 22 inch	1	USB, Component In,Composite In ,PC In	At least 1year, Onsite
LCD TV 32 inch	1	USB, Component In,Composite In ,PC In	At least 1year, Onsite

SCHEDULE NO: 21
TECHNICAL SPECIFICATION:

Net book Computer:

Processor: Intel Atom processor

Memory: 1 GB DDR

Storage: 250GB hard drive

Monitor: 10" LCD monitor

Operating System: Windows 7

Pre-Installed Software: MS-Office, Antivirus

Warranty: At least 1 year onsite.

SCHEDULE NO: 22
TECHNICAL SPECIFICATION:

Vertical Laminar Flow:

- Construction- fabricated from welded 16 gauge C.R. steel includes adjustable levellers.
- Work surface: 304 stainless steel/powder coated C. R. steel.
- Finish: exterior surface feature a chip-resistant, powder-coated finish.
- Pre-filters: disposable fibre glass.
- HEPA filter: choice of HEPA (rated 99.99% efficient@ 0.3µm particles) or ULPA (rated 99.99% efficient@0.12µm particles)
- Lighting: Fluorescent type with lux>800 & UV light.
- Air circulation 70%, Exhaust 30%, fresh air 30%
- External size 1000 x 780 x 1920mm (W x D x H)
- FFU airflow: 650 CFM (2" x 4"), 460 (2" x 3") of air at filter pressure drop from 0.35-0.795" W.G at 90 FPM.
- Proposal for full warranty up to two years from the date of complete and proper installation, covering on-call technical interventions, spare parts and travel.

SCHEDULE NO: 23
TECHNICAL SPECIFICATION:

Neonatal ventilators

1. Essential components

- Ventilator
- Air Compressor
- Reusable Circuit with online bacterial filter
- Humidifier
- Stand for circuit
- Operator manual

- Service manual

2. Type of ventilator: Continuous flow, time cycled, pressure control

3. Modes available:CPAP, IMV, SIMV, Assist/Control, PSV, VG (optional)

4. Range of set parameters

- Peak inspiratory pressure: 0-50 cms
- Positive end expiratory pressure: 0-20 cms
- Fraction of inspired oxygen: 21-100%
- Inspiratory time: 0.1- 3 secs
- Rate: 0-150 bpm
- Gas flow: 5-15 Lpm

5. Display: Both digital and analog
All set parameters as mentioned above

Measured parameters

- PIP, PEEP, Mean airway pressure
- FiO2
- Ventilator rate

Derived parameters

- Te, I:E ratio
- Leak percentage
- Tidal volume
- Minute ventilation

Pressure & flow waveforms and loops

Alarm message

Calibration

Silenced alarm

6. Alarms Both audio & visual

- Low & high pressure
- Compressor failure
- Failure of sensor/s
- Tube obstructed
- Power failure

7. Humidifier Flow resistance upto 1 cm H2O/L/Sec

Temperature range 31-40 degrees C
Temperature control ± 2°C

Digital display of temperature- range of display 5-80°C

Water level indicator

Warm up time less than 15 minutes

Alarms

Heater wire on:

Airway temp: Tracking ± 2°C from set temp
Chamber temp: If chamber temp varies ± 4°C from set temp for 20 minutes or alarm immediately if set chamber is exceeded by 10°C

Heater wire off:

Airway temp: Fixed at 41°C high & 29.5 °C
Low Chamber temp: limited to 60°C max

Should be compatible with both reusable & Disposable chambers and reusable & disposable Circuits

8. Power — 220-240 V, 50-60 Hz

Uninterrupted power supply for at least half hour

9. Spares with each ventilator

Reusable circuit with Y piece, heater wire, temp probe& adapter	5 each
Bacterial filter	5 each
Reusable humidifier chamber	5 each
Sensor cable	5 each
Oxygen cells	2 each
Flow/ pressure sensor	20 each

10. Warranty period: 2 years from date of installation

- Comprehensive maintenance contract for 5 years after warranty

CMC should include FiO2 blender, humidifier, air compressor, circuits, bacterial filter, flow/pressure sensor and oxygen cells to cover at least 5000 hours of actual ventilation per ventilator per year

SCHEDULE NO: 24
TECHNICAL SPECIFICATION:

Bubble CPAP

1. Servo controlled Humidifier base with digital temperature display, alarms for conditions like high & low temperature, humidity & disconnections.
2. Compressor – Air

3. Auto feed Humidifier Chamber with constant compressible volume to maintain CPAP pressure (Reusable Humidifier) if reusable = 6 (with each machine) if disposable = 300

4. Heated Breathing Circuit with heater wire technology to provide proper humidification, if Reusable 6 with each machine if disposable = 300

5. Temperature & flow sensor: Temperature & flow sensing of airway and humidifier chamber with feedback mechanism.

6. CPAP generator with adjustable CPAP from 3 to 10 cmH2O with generation of Bubbles = at least 10 extra generator with each machine

7. Safety provision for maximum pressure limiting in case of occlusions, pressure damping filter.

8. Facility for pressure monitoring & delivery FiO2 monitoring

9. Non – invasive Interface should include :

a) Nasal Tubing to hold the nasal prongs

b) Argyl Nasal Prongs of silicon in various sizes based on nasal diameter & width of septum

c) Infant Bonnets / Caps of different sizes to fit on head to hold nasal tubing & prongs

- Nasal tubings 70mm at least 20 with each machine
- Nasal prongs with each machine

1. Size 3.0mm/2.0mm x 20
2. 3.5mm/ 2.0mm x 20
3. 4.0mm/3.0mm x 20

- Infant Head bonnet with each machine
    1. Size 22cm -25 cm x 20
    2. 25cm- 29cm x 20
    3. 29cm- 36cm x 20
- Head gear 29-36cm x 20
- Chin strap 26-32cm x 5 = 20, 32-38cm x 5 = 20

10. Provision to deliver gas with selectable FiO2 (21% - 100%)

11. Unit should be supplied with Mobile stand with castor, mounting brackets (C clamp) & IV hook

12. Unit should be supplied with proper demonstration, user manual; setup guides & proper service back up.

13. Unit should be supplied with International FDAor CE (European Conformity) safety regulations & certifications.

14. Documentation

- User Manual in English.
- Service manual in English.
- List of important spare parts and accessories with their part number and costing.
- Certificate of calibration and inspection from factory.
- Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
- List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service/ technical manual.

SCHEDULE NO: 25
TECHNICAL SPECIFICATION:

Ethylene oxide (ETO) sterilizer machine:

(i) Description of Function:
Used in sterilization of items that are heat and moisture sensitive

(ii) Operational Requirements:
It should be fully automatic type for sterilization of heat sensitive goods such as

anesthetic tubing and other plastic disposable materials etc.

(iii) Technical specifications:

- The sterilization chamber should be double walled, corrosion and gas resistant of suitable alloy.
- The inner surface should be smoothly finished to minimize gas deposits.
- The chamber should be insulated against heat emission and the jacket should be connected to the warm water circulation arrangement.
- The sterilizer door should have a quick release locking arrangement with door opening. Suitable safety interlocking arrangement shall be provided for the door so that the sterilization process does not start unless the door is properly locked in position and during the program run it should not open.
- The sterilizer should be provided with a suitable vacuum pump and gas trap to separate and evacuate the gas.
- The sterilizer should be provided with an automatic programmable panel with memory for preset operating sequence of all programs of operation.
- Monitoring instruments should be provided with the ETO for proper operation and monitoring of sterilizing process such as pressure manometer, thermometer, limit selector for temperature and pressure etc.
- The ETO sterilizer should be able to operate for the minimum essential following cycles programmes:

a. Sterilization cycle for heat sensitive objects that ensure temperature from 40-75ºC with subsequent aeration for protection of the operating personnel.

b. Aeration cycle/program to extract residual gas out of the sterilized objects after each sterilization cycle.

c. Automatic chamber evacuation cycle with subsequent venting before releasing the door lock for opening, thereby prohibiting exposure of the operating personnel by gas dissolving from the chamber walls during shutdown period.

d. Gas disposal arrangement / catalytic converter.

(iv) Capacity:

7 -10 cubic feet/per cycle with capacity to process 18-20 cubic feet/24 hr. Firm should clearly state cycle time (Time from start to finish including aeration time) so that capacity to process total load in 24 hr can be calculated.

(v) Technical data:

a. Sterilization gas: Ethylene oxide
b. Sterilization method: Cold sterilization of heat sensitive materials.
c. Operating temp. Range: 40 to 75ºC
d. No. of doors: One.

(vi) System Configuration Accessories, spares and consumables

a. System as specified-
b. Sterilization basket of suitable size 1 No.
c. ETO gas cartridges 25 Nos.

d. Compressed Air Plant
e. Packing Material with Chemical Indicator of all sizes one roll each
f. Sealing Machine Heavy Duty - 1 No.

(vii) Environmental factors:

a. The entire unit & Gas cartridges should be EPA (Environmental Protection Agency or certified for Government authority in India. Statutory concerned with Environment protection & occupational safety regulations applicable)
b. Should meet IEC-60601-1-2:2001(Or Equivalent BIS)
c. General Requirements of Safety for Electromagnetic Compatibility. Or should comply with 89/366/EEC; EMC- directive.
d. The unit should be capable of being stored continuously in ambient temperature of 0 - 50 deg C and relative humidity of 15-90%
e. The unit should be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%.

(viii) Power Supply:

a. Power input to be 180-270VAC, 50Hz
b. UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.

(ix) Standards, Safety and Training:

a. It should meet International Organization for Standardization.Biological evaluation of medical devices. Ethylene oxide sterilization residuals [standard]. 1st ed. ISO 10993-7. 1995 (reaffirmed 2001)/ any international/ National standard for ETO Safety.
b. It should be FDA, CE, UL or BIS approved product.
c. Manufacturer/Supplier should have ISO certification for quality standards.
d. Electrical safety conforms to standards for electrical safety IEC-60601-1 General requirements.

(x) Documentation:

- User/Technical/Maintenance manuals to be supplied in English.
- Certificate of calibration and inspection.
- List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
- List of important spare parts and accessories with their part number and costing.
- Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
- Training and installation at end-user site.

Proposal for full warranty up to two years from the date of installation properly, covering on-call technical interventions, spare parts and travel.

SCHEDULE NO: 26
TECHNICAL SPECIFICATION:

Mist Fogger Machine for fumigation of SNCU:

(Specifications for Formalin vaporizer, disinfectant sprayer & electronic fumigator have been clubbed together in this heading)

- The machine should disperse a disinfectant into an aerosol of particle size of at least 5microns and keep it suspended in air for 40-60mins.
- The height of the blower should be at least 45º.

- The capacity of tank should be at least 5litres.
- The droplet size for the nozzle should be 5-15microns.
- The jet throw in the closed room should be at least 4.5-6 meters.
- It should be portable.
- It should have a single phase supply

It should run on 230volts 50Hz AC.

SCHEDULE NO: 27
TECHNICAL SPECIFICATION:

Industrial Grade Washing machine

- Capacity 7-10 kg of dry cloth/cycle.
- Capable of running for multiple cycles/day.
- Load detection should be automated.
- Time adjustment is self-mechanized.
- Wash program should be embedded with a temperature of 900ºC.

- Water after wash should be drained efficiently.
- The machine should consume less water and soap/detergent.
- Low noise
- Should be provided with a safety covering guard when wash program is set to high temperature.
- Should get high performance per watt.
- Power supply: Power input should be 220-240VAc, 50Hz.
- Voltage corrector/ stabilizer of appropriate ratings meeting ISI specifications (input 160-260V and output 220-240V and 50Hz).
- Standards, safety and training:
    a. It should be a safety certified approved product.
    b. Manufactures/ suppliers should have ISO certificate to Quality Standard.

Documentation:

a. User/Technical/Maintenance manuals to be supplied should be in English.
b. List of important spare parts and accessories with their part number and costing.

Maintenance and Warranty:

a. Training and installation at end-user site.

Proposal for full warranty up to two years from the date of installation properly, covering on-call technical interventions, spare parts and travel.

SCHEDULE NO: 28
TECHNICAL SPECIFICATION:

Industrial Grade Drying Machine:

- Capacity of drying 7-10 kg clothe/cycle.
- Capable of running for multiple cycles/day.
- Load detection should be automated.
- Should have 100% drying effect.

- Should be uniform drying of clothes.
- Should be odor free drying.
- Time adjustment is self-mechanized.
- Low noise
- Should get high performance per watt.

Power supply:

a. Power input should be 220-240VAc, 50Hz.
b. Voltage corrector/ stabilizer of appropriate ratings meeting ISI specifications (input 160-260V and output 220-240V and 50Hz).

Standards, safety and training:

a. It should be a safety certified approved product.
b. Manufactures/ suppliers should have ISO certificate to Quality Standard.

Documentation:

a. User/Technical/Maintenance manuals to be supplied should be in English.
b. List of important spare parts and accessories with their part number and costing.

Maintenance and Warranty:

a. Training and installation at end-user site.

Proposal for full warranty up to two years from the date of installation properly, covering on-call technical interventions, spare parts and travel.

SCHEDULE NO: 29
TECHNICAL SPECIFICATION:

Mini Floor Washer with Side Brush:

Description	Specification
Cleaning Capacity	300-400 sqm/hr

Brush Speed	600-700 rpm
Fresh Water Capacity	3-5 ltr
Motor Rating	750+26 W
Power Supply	230VAC+-6% 50Hz SP
Noise Level	69 db
Height with handle	1000 +/- 200 mm

SCHEDULE NO: 30
TECHNICAL SPECIFICATION:

3 bucket trolley on wheels with wringer:

Description	Specification
Bucket Capacity	2X25=50 lts

Width	70-90 cm
Diameter	40-50 cm
Height	90-100 cm
Tech Wringler	Should be provided
Wheel	4 Wheels

SCHEDULE NO: 31
TECHNICAL SPECIFICATION:

8.50-75 cm Wet & Dry Mop Stick

1) Adjustable Aluminum Light Handle with Powder Coating having height adjustment facility

2) Complete Base Plate should be made of Aluminum with Powder Coated Finish & incorporated with tension spring on one side for better grip.

3) Ergonomically designed, simple and easy to operate.

4) Easy maneuverability.

5) Insert Mop is made of a blend of Natural and Synthetic Fiber for Dry Sweeping and Wet Mopping with polypropylene cover.

6) The Swivel Base should allow 180° rotation for faster cleaning.

7) Spare Parts Manual to be provided.

8) Sample of the quoted product to be provided on demand / request.

SCHEDULE NO: 32
TECHNICAL SPECIFICATION:

Transport ventilator:

Light weight neonatal transport ventilator which should have the following specifications:

- MRI compatible
- Should allow precise oxygen concentration calibration
- Modes present : at least CMV, IMV & CPAP
- Pneumatically operated
- Alarm for low oxygen and air supply
- Time/pressure cycled
- Capable of delivering low tidal volumes
- All parts should be MR compatible
- Provided with at least 4 sets of ventilator tubings
- MR compatible oxygen cylinder should be provided along with refilling license has to be provided
- compressor – optional

SCHEDULE NO: 33
TECHNICAL SPECIFICATION:

Transport incubator:

- lightweight, easily transportable incubator with flexible design
- should be capable to be used in conjunction with ventilators
- easy to clean
- Multi-position restraining straps should be provided to hold the infant securely during transport.
- The incubator should accept a 5 liter oxygen cylinder and an auxiliary 5 liter cylinder.
- Should operate on its own battery, which can support it for at least 3 hours, or on power from a vehicle or AC mains.
- Should have collapsible stand to accommodate in the transport incubator

SCHEDULE NO: 34

TECHNICAL SPECIFICATION:

Ambulance specifications

- Low floor height to enable easy loading and unloading
- Low turning radius
- 4-c ylinder engine BSIII compliant
- Wheel base 3050- 3350
- Sitting capacity + 1 driver
- 6 ft internal height

A	Interior fabrication
1	Interior panelling fabricated with seamless fibre reinforced plastic (FRP)
2	Gel painted
3	Heavy duty thermal insulation to provide better temperature control
4	Drivers and patients cabin partition in FRP with sliding communication window
5	Overhead rack with sliding glass for storage
6	Heavy duty homogenous vinyl flooring with waterproof ply board
7	Grab rail on rear entry door for easy access
8	Roof mounted stainless steel hand support rail with 2 nos. of strap handle
9	Doctor seat
10	Dual purpose attendance seat
11	Stainless steel cladded medical cabinets for storage
12	2 way intercom system between driver and patient cabin
13	Wash basin with foot operated motorized tap
14	Water storage tank for wash basin
15	Stainless steel waste bin
16	Hooks for IV bottles 2 with Iv holding plates
17	Mounts (brackets)for critical care equipments
	a. Transport incubator with trolley- 1 set (TINC 101 from phoenix) b. Patient monitoring system-1 c.Ventilator-1 d. syringe pump-2

	e. Nebulizer-1 f. Stretcher trolley-1 g. Portable suction unit-1
18	Fire extinguisher 400gm
19	Full length aluminium foot step at rear entry door footstep light
20	Colour of Upholstery in all places will be blue
B	Electrical 220 Volt
1	5 amp sockets – 2 nos Crabtree make
2	15 amp sockets – 1 nos Crabtree make
3	220 V AC/ 12 V DC out-let plug point
4	Charging socket for inverter from 220 V AC with 5 meters of charging lead
5	Up-gradation of vehicle alternator to 90amps alternator
C	Electrical 12 Volt
1	Tube lights 12 V DC- 4 nos.
2	High intensity blinkers 2 nos. on three sides (6nos)
3	Emergency LED light bar
4	Electronic siren 3 tone and public address system
5	Fans 2 nos. and digital clock fixed in Patient cabin
6	Patient examination light 1 no.
7	Electric protection circuit with heavy duty 12 V DC cut off switch (Siemens or equivalent make) located near driver seat for easy accessibility
8	Rear door opening alarm in Driver cabin
D	Exterior design
1	Customized external graphics with hospital name etc. As per design provided by hospital.
E	Air conditioning system
1	Single blower Air-conditioning system coupled with vehicle engine with automatic digital control panel with temperature display in patient cabin
F	Oxygen therapy
1	Integrated oxygen supply system in the vehicle with cylinder manifold cabinet for attaching 1 no. of 47L water capacity cylinder (excluding cylinders) and integrated piping system terminating at the outlet at the patients head end on the side wall. The system comprises of 3 outlets concealed on the side wall. One outlet normally meant for oxygen therapy through flow meter, one meant for driving breathing equipment like ventilators and one standby to drive aspirators, etc. The cylinder is to be fitted appropriately.
2	High pressure flexible stainless steel braded Teflon tubing from oxygen cylinders to regulator.
3	Oxygen regulator with 2 stage regulation for better patient safety with pressure gauge near doctor seat for easy accessibility.
4	Complete gas pipe lining with tubing embedded in control panel having top loading outlet points for Oxygen

Superintendent

M.R. Bangur Hospital